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**Environmental Management Commission  
Waquoit Bay National Estuarine Research Reserve  
East Falmouth, Massachusetts  
October 7, 2010  
2:30 p.m.**

***Draft Meeting Minutes***

<b><u>Members:</u></b>	<b><u>Organization:</u></b>	<b><u>Telephone:</u></b>	<b><u>E-Mail:</u></b>
Commissioner Mary Griffin	EMC/DF&G	617-626-1550	
Commissioner Richard Sullivan	EMC/DCR	617-626-1250	
Commissioner Laurie Burt	EMC/DEP	617 292-5856	

  

<b><u>Environmental Officer:</u></b>	<b><u>Organization:</u></b>	<b><u>Telephone:</u></b>	<b><u>E-mail:</u></b>
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<b><u>Attendees:</u></b>	<b><u>Organization:</u></b>	<b><u>Telephone:</u></b>	<b><u>E-Mail:</u></b>
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John Miller	CH2M Hill	617-834-9519	John.miller@ch2m.com
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Henry Oheim	NSTAR	781-441-3236	Henry.oheim@nstar.com
Dennis D. Galvam	NSTAR	508-732-4206	
Kate McEneaney	Epsilon Associates	978-461-6207	kmceneaney@epsilonassociates.com
Sue Rohrbach	Sen. O'Leary	508-775-0162	olearyr@gis.net

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**Handouts Distributed at Meeting:**

1. Presentation: AFCEE Wind Turbine Project Powering Groundwater Cleanup with Renewable Energy
2. Presentation: The National Environmental Policy Act (NEPA)/AFCEE Wind Turbine Project Powering Groundwater Cleanup with Renewable Energy/Environmental Assessment
3. Presentation: NStar Lower SEMA 345 kV Transmission Project
4. Presentation: Massachusetts National Guard Environmental and Readiness Center Update
5. EMC Draft Meeting Minutes: April 8, 2010

**Agenda Item #1. Chairman's Comments**

Environmental Management Commission (EMC) Chair Mary Griffin, convened the meeting at 2:30 p.m. with general comments.

**Agenda Item #2. Member Comments**

Commissioner Sullivan and Commissioner Burt welcomed everyone.

**Agenda Item #3. Review of Meeting Minutes**

Commissioner Sullivan made a motion to approve the minutes from the April 8, 2010, EMC meeting, and Commissioner Griffin seconded the motion. The minutes were approved unanimously, as written.

**Agenda Item #4. AFCEE Wind Turbine Environmental Assessment Update**

Mr. Davis, Remediation Program Manager for the Air Force Center for Engineering and the Environment's (AFCEE's) Installation Restoration Program (IRP), stated the purpose of the presentation is to update and inform the EMC regarding AFCEE's wind turbine project. He said that there will be a presentation on the environmental assessment by Dr. Stephen Petron, CH2M Hill. The project is being executed as part of the AFCEE's IRP and is considered a CERCLA (Superfund) action. The AFCEE/IRP cleanup program uses nine pump and treat systems to remediate 13.5 million gallons of contaminated groundwater per day. He explained that the wind turbines will help reduce air emissions and electrical costs associated with the cleanup program. Mr. Davis displayed a map of the areas of groundwater that are being treated under the program.

Mr. Davis stated that the wind energy goals are first and foremost that the project must be compatible with the existing purposes of the Reserve: groundwater supply, wildlife habitat, and military training missions at the MMR. He said other goals are to continue to be a good neighbor to both on-base and off-base entities, be fiscally responsible and economically beneficial to the taxpayers, and help meet the clean energy goals set by Federal and State governments.

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Mr. Davis stated that the program is required to meet executive orders (EO) EO13423: Strengthening Federal Environment, Energy, and Transportation Management, which requires Federal agencies to use electricity from renewable resources within its facilities by implementing renewable energy projects, and EO13514: Federal Leadership in Environmental, Energy, and Economic Performance. The Department of Defense (DOD) has set a goal of reducing a greenhouse gas emissions by 34% compared to the baseline set in 2008.

Mr. Davis said that the first wind turbine constructed by IRP (Wind Turbine I) is operating in the Southwest corner of the base. He displayed a map of the existing wind turbine and the location of the additional turbines proposed in the northern part of the base along the PAVE PAWS access road. Four sites were reviewed and the environmental assessment included three of the four sites; and two sites were proposed to be built: Turbine Site 1 and Turbine Site 2.

Mr. Davis stated that the Environmental Assessment process has been ongoing since February 2010 and included presentations to the SAC, CAC, and EMC. A 30-day public comment period on the Draft EA was held from August 6 to September 7, 2010. A poster session and public meeting was held on August 25, 2010, as a primary agenda item for a joint CAC/SAC meeting. Comments were considered and the Final EA and Finding of No Significant Impact (FONSI) are being prepared and will be forwarded to the Air Force for signature pending the results of the meeting.

Mr. Davis stated that there has been coordination with organizations during this process that Dr. Petron references in the environmental assessment.

Dr. Petron said the proposed action is to construct and operate up to three utility-scale wind turbines along Flatrock Hill Road. Included in that proposal is construction of access roads connecting the tower locations with Flatrock Hill Road, construction of electrical collector lines along Flatrock Hill Road and tying connector lines into the existing substation below PAVE PAWS.

Dr. Petron stated that land use included a small permanent disturbance of up to 0.7 acres. The land use is consistent with the Community Working Group Master Plan--supporting cleanup while using non-polluting alternative energy (wind power). It also adheres to the Environmental Performance Standards.

Dr. Petron stated that the vegetation in the area where the two turbines are proposed is pitch pine-scrub oak forest. There will be 0.44 acres of permanent clearing (roads and foundations) and up to 4.0 acres of temporary clearing (lay down areas). The vegetation will be flush cut to preserve the root structure and enhance natural revegetation. The area will be seeded with native species to re-establish vegetation in temporary-cleared areas, and invasive species management will include monitoring during construction and plans for controlling any invasive species.

Dr. Petron stated that the EA concluded minor impact to birds and bats. IRP coordinated with the U.S. Fish and Wildlife Service (FWS), and bird and bat monitoring will occur pre- and post-construction and longer, if necessary. He said there will be adaptive management of operations, if necessary.

Dr. Petron stated that for rare, threatened and endangered species there are Federally-listed species to consider: the roseate tern (endangered), the piping plover (threatened), and the New England cottontail (candidate). He explained that the FWS concurred with the biological evaluation of no adverse impact. There is a state-listed species to consider, the eastern box turtle; impacts will be minimized by using BMPs and pre-construction surveys.

When considering socioeconomic and environmental justice, Dr. Petron said that the nearest residences to the turbines, located over one-half mile away and across Rte. 6, may experience low noise emissions

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that are similar to or below current background levels. Visually, the turbines will not dominate views and are consistent with other features in area such as transmission lines, the Sagamore Bridge, and PAVE PAWS.

Dr. Petron said that the EA concluded that there are no significant impacts identified for all the resources that were reviewed.

Dr. Petron reported that the Draft EA was available for public review from August 6 to September 7, 2010. The EA was briefed at a joint meeting of the SAC and CAC on August 25 and at an MMR Cleanup Team meeting on September 8, as well as tonight's EMC meeting.

Dr. Petron said that the primary concerns expressed by the public and the agencies are ensure the groundwater is protected: including secondary containment for transformers, use of non-hazardous fluids, and a spill response plan update. He said there was a question about the decommissioning process and cost. IRP is doing its plan for eventual decommissioning; it will be the responsibility of the Federal government and funding will be procured at that time. He said that habitat impacts will be minimized during construction to ensure bird and bat impacts and monitoring, keeping turtles from entering the site while not interfering with their migration patterns; there will be revegetation and invasive species monitoring.

Dr. Petron stated that the next steps are to complete the NEPA process, construct the road and foundation in fall/winter 2010. Bird and bat monitoring will be conducted during the spring and fall migration periods in 2011 and 2012, he said. The turbine will be installed in early fall 2011. He said that IRP will report back to the stakeholders and the Federal and state governments how it is working, if there are any impacts, how much pollution is avoided, and how much taxpayer money is saved.

Commissioner Sullivan asked if there will be a report back to the EMC. Mr. Davis said that there is nothing formal set up, but it could be arranged with Mr. Begley.

Commissioner Griffin asked if there's a procedure for decommissioning the turbines in any legal documents. Mr. Davis said that a legal instrument for property is not needed. Mr. Davis said that every year, money is programmed out for the next 30 years and includes the five year reviews operation and maintenance costs. He said that's what's called a "cost to complete" and the next one IRP generates will include decommissioning the turbines as a future cost.

Commissioner Griffin asked how long is it expected that the pump and treat system will be powered by these wind turbines. Mr. Davis said that the pump and treat system will go beyond the life of the turbines; the turbines have a twenty year life. IRP expects to be treating some plumes until the 2040s. Until 2014, the turbines will be generating enough electricity to meet all of IRP's needs and then after that time frame, extraction wells will be turned off as plumes are cleaned up. At that point the turbines will be generating more power than needed and the value of that electricity has to go back to a central DoD account for O&M uses across DoD. He said we're advocates of having this excess money be used locally, but as the statute is written now it can't be done.

Commissioner Burt said that there are no set funds put aside for decommissioning the turbines as their might be in some other kind of lease arrangement. She asked if there's any document that will document that at the point of this approval, it is the current commitment that the turbines will be decommissioned. Mr. Davis said that part of that "cost to complete" is to generate a document that lays out the thought process, like a decommissioning plan. Imagine, in the future, looking at cost and asking why is there a dollar figure for decommissioning, Commissioner Burt asked will be a separate document. Mr. Davis said that it is a stand-alone document. Commissioner Burt asked when will it be generated. Mr. Davis

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said that with each year's "environmental liability statement," AFCEE will do one in the summer of 2011 and at that point the "cost to complete" is included in it.

Commissioner Griffin asked if the decommissioning plan is something that Mr. Davis could share with the Commission. She said she thinks the Commission will want to know that there is a viable plan to remove the turbines at the end of the groundwater remediation. Mr. Davis replied we would generate that next summer and it would include a certifiable cost estimate.

COL Crivello inquired about the 4 acre area set aside for construction. He asked about the two locations if that is included at each site or is it separate area unto itself.

Dr. Petron stated that the 4 acres are within those two preferred sites, which are sites one and two.

Mr. Davis stated that the 4 acres included the entrance road and an area around each turbine site that would be the lay down area for the materials for construction.

COL Crivello asked if it includes the entrance road. Mr. Davis confirmed that it does. COL Crivello asked if there was a way to try to minimize that additional clearing if possible. Mr. Davis said we brought it down as much as possible, it is a tight construction site now and we don't want to be any closer to the road. COL Crivello asked if there is any additional clearing that is needed could be minimized. Mr. Davis said that it is cut down to the bare bones now, the construction workers would like to have more room than we are offering them, but that is what they get.

Dr. Petron said that we are planning on having the area revegetated naturally so that it will recover over time into what was there before so it is not permanent impacts.

COL Crivello stated that if you could find a way to minimize impacts that would be good.

#### **Agenda Item #5. Advisory Council Report**

Mr. Harding, CAC chair, stated that the CAC recently met jointly with the SAC to review IRP's wind turbine project. He said that the areas to be cleared were taken into consideration and decommissioning was reviewed and incorporated into the EA. He said there's a need for renewable energy to expand and be a part of Cape Cod and Massachusetts and to ensure that these projects move forward with the environment and people in mind. Mr. Harding said that it is important to have wind power, but it is more important where the turbines are placed and ensure that when there placed it is in a good spot. He salutes the Guard and Air Force for moving forward with the initiative and to ensure that people on Cape Cod concerns are taken care of. Mr. Harding attended the MMRCT meeting recently and they had the same concerns that the CAC/SAC, but a lot of the concerns have been met by the Army and the Air Force.

Mr. Begley stated that at the CAC/SAC meeting questions arose about what additional turbines may be just around the corner, such as the turbines PAVE PAWS had expressed interest in siting. Mr. Begley indicated there is a representative from PAVE PAWS who will give an update.

Mr. Mellin, the support officer at PAVE PAWS/6<sup>th</sup> Space Warning Squadron (6SWS), stated that the 6SWS is also looking at ways to save energy. We have about a million and half dollar year bill to our radar so we pay very close attention and he has actually worked with AFCEE as they were going forward on their wind turbines. So our parent commander for Space Command has said that they want to pursue that and we have been looking at doing an analysis as you just finished up an analysis saying it is cost effective for us to look at installing additional two turbines there as well. We originally were looking at trying to do this in the FY-12 timeframe, but we understand the making of money that is available this

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year so we are looking at. We are just kind of at the stage now where we are getting into the scenarios and start going through the approval process and the notifications to make sure that they are aware of what we are doing. A lot to do and a lot to overcome as we move forward on it and following the trail that has been blazed by Mr. Davis and Ms. Forbes. It is the very beginning of the process.

Commissioner Griffin asked as you are doing your planning are you looking to minimize natural resource impacts in terms of the layout or the location. Mr. Mellin said very much so, the two areas that we are considering looks like two turbines is the right number for us as well. One turbine that would be inside within our current 88 acres circle up there for PAVE PAWS site because the top the way the wind currents are we really can't get two on our site so we are looking at putting the second one on the Camp Edwards side. So part of what is nice for us are we can follow everything that has been layed out for the AFCEE turbines.

Commissioner Burt asked if you have focused a capacity of turbines or range that you are targeting. Mr. Mellin said that you are trying to go with the exact same models that AFCEE is the benefits for us is to have the same turbines when it comes down the road repairing them. One site is ours and the other site we discussed with Mr. Begley the old battle position 18 which is already an area that has been disturbed and used previously.

Mr. Begley stated that Mr. Mellin mentioned that he had coordinated with Camp Edwards for the site on Camp Edwards. Mr. Mellin said that we are already starting the process with real estate issues that we will have to work through on that. COL Crivello stated that we really haven't analyzed the impact of training. Mr. Mellin said no not yet, we are at the start of this process of analysis.

Commissioner Griffin stated that there is a bit of a distinction between wind turbines to power the remediation on site and turbines for other onsite uses of the military so it raises some different issues that might be worth thinking about.

#### **Agenda Item #6. NStar Overview of Proposed Work in the Reserve**

Mr. Oheim, NStar Project Director, gave a summary of the areas of service territories Lower SEMA Transmission supply, or lower southeastern Massachusetts, west of New Bedford to north of Plymouth and east of Tremont, a substation off of I495 and Cape Cod territories.

Mr. Oheim stated that NStar's proposed project is the long-term solution to: resolve electric reliability need long term. Eliminate uplift charges to customers with an environmentally responsible solution.

Mr. Oheim stated that there were substation upgrades and transmission lines increased capability to transmit more power over the transmission lines to Cape Cod, improved supply redundancy.

Mr. Oheim stated that the Route alternatives join at Bournedale Road, cross Cape Cod Canal to vicinity of Bourne switching station.

Mr. Oheim stated that 115kv transmission lines will be supplied from the new station to strengthen the supply from the mid-Cape. He stated that there will be no new transmission line construction on Cape Cod from the vicinity of the Bourne switchyard to West Barnstable.

Mr. Oheim said the steel monopoles will minimize impact to environment and are visually similar to existing structures.

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Mr. Oheim said that the planning and engineering phase of the project is scheduled to be completed in December 2010. The environmental process was completed in May 2010. From January 2010 to December 2011, NStar will be conducting the regulatory and permitting process. Mobilization and construction is planned from November 2011 to December 2012.

Commissioner Burt said she is aware of the controversy about the upcharge that is a major concern with the reliance on Canal power. She asked how much Canal will be operating if at all once there's this greatly augmented transmission capacity.

Mr. Oheim stated that this project eliminates the need to run Canal out of merit. He said Canal will have to compete on a local generator market with all the other area generators and Canal's challenge will be to become more efficient.

Commissioner Sullivan asked if they are building only one of the routes. Mr. Oheim said that the preferred route is a little bit shorter of the alternate route by about a mile and half shorter. Commissioner Sullivan said that Miles Standish is the preferred route and thanked him for talking to the Commissioner's staff on that.

Mr. Oheim stated that the Southern route that goes down to Carver and Middleboro is a very wet route: there are a lot of wetlands and cranberry bogs--it is a buildable route, but it is a challenge.

Commissioner Griffin asked what is the total square acreage on the Reserve that is impacted by the project. Mr. Oheim replied that he doesn't have the square footage, but from the Canal back to Bourne station is about a quarter of a mile. The expansion of the Bourne station will take up a few acres, he said.

Commissioner Griffin asked if that will be 2-3 acres on the Reserve. Mr. Oheim replied that it will be 2 to 3 acres on the Reserve plus a couple of structures in that quarter mile from the Canal.

Commissioner Griffin said that it seems like the biggest impact to natural resources and wildlife would likely be impacts from construction. She asked how that will be minimized. Mr. Oheim replied that we complied normally with the local Conservation Commissions and dealing with any wetlands. He said that the area sits on the top of a hill, the terrain is not desirable, and it is also the place where a lot of transmission lines come together--especially the 115 kV transmission line. He said that all the environmental studies have been done, and the eastern box turtle is the biggest concern. He said a lot of turtle studies were done and there will be turtle patrol during construction.

Commissioner Griffin asked if they took permits from the Natural Heritage and Endangered Species Program. Mr. Oheim replied that he thinks they avoided take permits.

Ms. McEneaney, consultant for NStar, said that they have been involved with Natural Heritage for almost a year and are still in the process of working out exactly what will be necessary. She said they are hoping to avoid the take permit. Ms. McEneaney said that they are passively surveying along the entire route.

Mr. Begley noted that NStar has filed with MEPA. In reference to slide 16 (the Southwest corner), he asked if the black line is the extent of work or the extent of a new fence that would go up around the substation and asked for an explanation on why it is crossing the road there. Mr. Oheim replied that it is an area of road that is approximately what the easement is, the actual station is inside of that and is well within the easement boundaries. He explained the fence would not cross in the road and the slide does not actually show where the fence line is. Mr. Oheim said that he can forward drawings. Mr. Begley said that he has Figure 13 that was filed, but he received a message that one of the figures in the ENF is labeled as "area on hold" survey information, and the contour information is still being gathered. He said

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he thinks it's important as that comes together to show exactly the area that will be disturbed. Mr. Oheim agreed and said they will definitely stay within that easement.

Ms. McConnell asked if it was 1985 when NStar received the additional easement for the one transmission line.

Mr. Oheim stated that the one transmission line that runs from the Canal all the way down to the Barnstable station was built in the mid 1980s. The easement was believed to be already there.

Ms. McConnell asked how many acres NStar now has for the easement.

Mr. Oheim asked for what distance? Ms. McConnell said any area that impacts MMR. Mr. Oheim said he will have to report back on the number of acres; there are quite a few easements with transmission lines on the Reserve.

Ms. McConnell asked how many more acres are going to be involved in the process. Mr. Oheim replied that no additional acres will be involved as existing easements will be used. Ms. McConnell asked if it is within the easements. Mr. Oheim said that is correct.

Mr. Begley stated that at a previous meeting the Commissioners asked for an update on some of the vegetation management practices that had been on-going at the base such as the herbicide spraying that was in the news. He said that the EMC requested that NStar provide information on which chemicals were used, in what quantity, and at what locations. He said that he still hasn't received that material and would like the information. Mr. Begley also requested a presentation at a future meeting.

Mr. Galvam stated that he does have the information available and will forward it to Mr. Begley. He said that NStar has been meeting with the Cape Cod Commission, and could do a presentation on vegetation management in the future.

COL Crivello asked if there is a military representation at the NStar meetings. Mr. Galvam was not aware of one.

#### **Agenda Item #7. Massachusetts National Guard Updates**

Dr. Ciaranca, deputy director of the E&RC, said he would like to welcome COL Crivello, the new commander of Camp Edwards. He reported that the transition to state employment is in process and there is a federal bridge contract in the interim. The process is expected to be complete in January. He reported that updates will be made to the Upper Cape boards of selectmen. A Camp Edwards Open House will be held on October 23 and October 24, and it is open to the public.

Dr. Ciaranca stated that recycling at Camp Edwards is in process. There was soldier awareness training and participation during the XCTC training. The program has been very successful, he said.

Dr. Ciaranca stated that the turkey hunt was successful and included a youth turkey hunt on April 24, 2010, with four hunters participating and two turkeys taken. The main hunt was conducted from May 3-7 with 57 hunters participating and 14 turkeys taken. The 2010 archery deer hunt on Camp Edwards is scheduled for November 10-13. Shotgun scheduled for November 2- December 4 and primitive fire-arms are scheduled December 15-18.

Mr. Kelly, natural resources manager, said that the field crew was minimal this year. Ms. Curtis, natural resources planner, worked very well with the field crew, he said. The New England Cottontail, which is a



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candidate for federal listing, was one of their research projects. Seven rabbits were captured, including eastern cottontail rabbits. Dr. Ciaranca stated that Mr. Kelly and department have done a great job with federal and state partnerships to address endangered species. Mr. French has suggested trapping animals on site to use in repopulating the species. The Cape and Islands has been recommended as an area repopulation.

Commissioner Griffin said that the rabbits that are usually seen are the Eastern Cottontail. The New England Cottontail is a species of significant decline. The MMR is one of the best habitats in the state for the New England Cottontail.

Dr. Ciaranca stated that the New England Cottontail is primarily a shrub habitat.

Dr. Ciaranca stated that the base gym, originally constructed circa 1942, is being rehabilitated in 2010. The base gym will be the main communications center for Camp Edwards.

Dr. Ciaranca said that an asphalt dump site was discovered on MMR at the Camp Edwards boundary on Mass Highway and NStar property. He displayed the area of detail on the map. The site is being cleaned up by Clean Harbors, he said.

Mr. Begley said that the material is going off to an asphalt batching plant for recycling.

Dr. Ciaranca stated that the ultimate training round (UTM) pilot period expired September 16 and all the requirements of the approval letter were accomplished. Best management practices (BMPs) and standard operating procedures (SOPs) were developed and two progress reports were submitted. The Guard will be requesting that the SAC and CAC recommend that the EMC to support the permanent inclusion of UTM and FX Marking Round on the approved munitions list for Camp Edwards. The request letter has yet to be sent but will be presented to the EMC in the future.

Commissioner Burt asked if it would include the lead-free version. Dr. Ciaranca replied that the lead is not in the round. Mr. Begley said that in clarification, lead-free primer was discussed in the UTM approval process.

Dr. Ciaranca stated that he does not recall whether the lead-free primer was included in the letter. Mr. Begley noted that it does include the lead-free primer. Mr. Begley said the issue at the time was that the company makes two versions, lead-free and with lead, and the Army purchased the primer containing lead. Originally, it was stated as part of the motion that the Guard sees what progress the Army could make towards purchasing the lead-free version. Mr. Begley said he is not sure if there have been letters from the MA Guard to National Guard Bureau about that. Dr. Ciaranca said that it may be difficult for Guard Bureau to influence DoD's purchases.

Commissioner Sullivan stated that the EMC had requested that the MANG use whatever influence it can to move in that direction. He asked what efforts have been made. Dr. Ciaranca said that he is not sure the status of the request.

Commissioner Burt stated that Mr. Davis, the Deputy Assistant Secretary of the Army for Environment, Safety and Occupational Health, was enthusiastic about using Camp Edwards as a "poster child" for maximizing the use of lead-free ammunition.

COL Crivello said that the MANG and Camp Edwards can work with National Guard Bureau to work with the Department of the Army push to the front of the line on the request. He noted that Mr. Davis has moved on and he is hopeful the Guard can develop the same relationship with his replacement to

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handle the request. He said they were successful on the hand grenade simulator and hopefully will be with the lead-free request.

Commissioner Griffin stated that at the time of request the Guard can show what steps have been taken as it pursues the alternatives.

Commissioner Burt stated that having raised the expectations that there is an alternative available, it would be disappointing if the intention never materialized in terms of the request between the Guard and the actual supply at the Military for bureaucratic or other reasons. She said let's bring those good intentions together and actually see some action to see if we could maximize this environmental friendly product, she said.

Dr. Ciaranca stated there are STAPP systems on Juliet, Kilo, and Tango ranges. Juliet and Kilo ranges had a site drainage problem. The site drainage has been completed and is highly successful. Lysimeters have been installed. Site sampling for lead, nitroglycerin, copper, tungsten and antimony has been conducted, but the results have not been submitted.

Dr. Ciaranca stated that the Guard has been working with the Small Arms Range Working Group (SARWG) on Sierra Range. Sierra Range is a modified record of firing range, or a pop-up target range. It is required for soldiers for efficiency prior to deployment. He explained that there is a requirement at different yardage or meters that targets to shoot certain amounts of bullets at each one. The range was discussed in our 2007 Small Arms Range Pollution Prevention Plan. He said that the alternatives analysis is in draft form, which evaluates the bullet capture system or the pollution prevention specific to Sierra Range. A line of site analysis was completed for the range: all 96 lanes were evaluated for target locations, where the bullets go when fired--low, center mass, and high shot. The line of sight was done first on paper, then on computer, and then using a target acquisition laser. Dr. Ciaranca pointed out where the bullets shot at the target would land in the berm at the 300 meter line. EPA wanted to require backstop berms at all target locations, which can have a dramatic impact on training as far as the visualization of the target as it pops up. By regulation, the soldiers need to see about 90% of the target, he said.

Dr. Ciaranca said that there will be a test fire at the range on October 25, 2010. During the test fire, approximately 5,000 rounds will be fired on Lane 6 because it is the center and high point of the range. The plan is to have the laser evaluation proved out and then, in coordination with the SARWG, best management practices will be developed to avoid depositing lead permanently in the environment.

Dr. Ciaranca stated that alternative copper ammunition is in production. The priority for use is Afghanistan and Iraq, then the active bases and then the Guard.

COL Crivello said he questioned why the alternative ammunition could not be sent to MMR first. He said that the rounds are going overseas first as priority, the second priority is not much the active duty bases, but the mobilization stations where the units prior to active duty. He would like to see if MMR could move to the front of the line for the next training period with the support of the Adjutant General and the National Guard Bureau.

Commissioner Burt stated that it is somewhat reassuring knowing that the ammunition is going into the actual battlefield areas.

Mr. Begley stated that further reason for the ammunition going over to Afghanistan and Iraq is that it is more effective in battle than the current lead rounds.

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Dr. Ciaranca said that you want soldiers to be familiar with the ammunition before they deploy.

COL Crivello stated that Sierra range is the top priority and for soldiers to do prior to being mobilized to use the 300 meter range. Tango, Juliet and Kilo ranges are 25 meters and they are great for primary training and weapons, but to actually qualify, a range like Sierra range is needed.

Mr. Begley stated that in addition to the EMC approval process the Guard must complete a requirement in the MEPA certificate that requires a Supplemental Environmental Impact Report (SEIR) be completed.

Dr. Ciaranca stated that the SEIR requires the alternative analysis to be completed.

Dr. Ciaranca stated that the XCTC was reviewed by US EPA, MassDEP, EMC, and the public review. There was no interference with the cleanup programs and it was well coordinated. XCTC was consistent with the Integrated Natural Resources Management Plan (INCRMP). There was consistency with Chapter 47, and regular site visits were conducted by Mr. Begley, range control and the E&RC.

Dr. Ciaranca stated that there was one box turtle found dead on the road. There is less an occurrence of that on the MMR than outside of the MMR.

Dr. Ciaranca stated that ammunition was tracked and the debris was policed from the simulators and blanks. There is always room for improvement on picking up brass. He said that as time goes on soldiers get better with recycling and at policing the brass. He said that a lot of posts make money from recycling the brass, but the MMR does not have that capability.

Dr. Ciaranca stated that there were no reportable spills, but we did have 13 small spills that included anti freeze, 1 quart of hydraulic fluid, and some diesel fuel. At the beginning of the exercise, the soldiers would top off the Humvees and with expansion in tanks the overflow belt would send out fuel so the very second day of the exercise they were given orders to fill the tanks only 2/3 full to account for expansion. The spills were all cleaned up according to policies and standards.

COL Crivello said that we did a lot of planning to make this happen successfully. It protected the environment and protected the soldiers, and there were very few injuries

Dr. Ciaranca reported that many groups came to view the training, including representatives from the Department of Army, NGB, MANG, other state National Guards, environmental regulators, and other groups.

LTC Bertone said that the people who run the exercise was very pleased with the way the state supported them, and the way the installation personnel, the regulators, and the visitors supported the training. They were impressed with the effort that the Guard put forward to get them through to train soldiers.

Dr. Ciaranca said they literally used the word “stunned” at the amount of cooperation they saw, and we took it for granted that it is what we are supposed to do.

COL Crivello said that one of the other things that they told us, they go all over the country to bases. The regulations here at Camp Edwards are very similar to other bases, some may be a little stronger because of the unique situation we have here. But it is no different there is a certain set of regulations that are required in order to sustain the environment into the future. He said he learned a lot from that regard to how other bases are doing business.

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Dr. Ciaranca said that in the future, the Guard would like to take advantage of these portable venues to sustain and improve its training capability. The Guard would like to use the areas that were already utilized by XCTC to provide a collective training capability. For instance, the MOUT site in the southern part of the base does not have 360-degree access, so the Guard would like to take some of these containers in the MOUT site or the buildings used during XCTC and bring them out to the area across from Range Control, and a bivouac on the main road to be able to do this type of training every year.

Dr. Ciaranca said that if any of the reduced MEPA thresholds were exceeded, the Guard we would have to do an ENF or a notice of project change with the state. The Guard would use areas that were already utilized; there would be no permanent construction as they would be using reconfigurable connex boxes or pop-up buildings like those used for the XCT training. The connex containers could be moved from area to area; the ability to reconfigure or move it to a different location is always of a high training value, he said.

COL Crivello said he thinks that using these portable containers meets and exceeds the training requirements to keep these scenarios fresh versus building hardened facilities to do that type of training, which was what the doctrine was in the past.

Commissioner Griffin said this interesting that you are thinking of less permanent movable structures. She said she wondered how that relates to an urban assault village, which the EMC heard about a year or more ago.

Dr. Ciaranca stated that would be a CACTF (Combined Arms Collective Training Facility).

Commissioner Griffin asked if that would be in addition to that or in lieu of that.

COL Crivello said it would probably be in lieu of a CACTF, which would require \$35 million to get it funded, and it probably wouldn't be funded until FY-15 and would not be built until FY-17. He said this training is needed now, but the reality of getting a project of that magnitude funded is not too real. He said the value of the connex boxes is they're quicker and cheaper, they're portable and semi-permanent. The Guard has a piece of equipment to pick them and move them--do a training event, pick them up, get them out of the training area and then when another training event happens, bring them out and accomplish those same requirements in a month

Dr. Ciaranca said that the cost of a facility would be \$40 million, whereas XCTC was \$9-\$12 million. The Guard has connex containers and equipment to move them, so it is just the cost of that labor and setting that up.

COL Crivello said that is the thought process going forward, the EMC liked what it saw during XCTC and it looks like something the Guard could accomplish at minimal cost and minimal impact.

Commissioner Griffin said that she enjoyed visiting the training, and learned a lot--it was a really great experience.

Commissioner Burt said that she also enjoyed the visit.

Commissioner Burt asked if "semi-permanent" means mobile, facile and flexible.

Dr. Ciaranca said yes, like the XCTC facilities.

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Commissioner Burt said she applauds that because she thinks that is much more consistent with the environment here.

Mr. Begley said that this preliminary information, the number of buildings has yet to be determined. He asked what is the Guard's plan for public outreach and how would it be packaged with any other planning the Guard is thinking of.

COL Crivello said that there are three components to the military operations and urban training: the MOUT site, or CACTF; a shoot house, which we already have in the Cantonment area; and the MOUT urban assault course. Each one is a building block. The MOUT urban assault course allows soldiers to do individual techniques such as clearing a doorway, windows, firing a grenade launcher. The shoothouse gives soldiers confidence in firing weapons in a live-fire scenario. It is then all put together collectively in the CACTF.

COL Crivello said that he would like to approach it in a way that we develop a plan that is practical, that is realistic, and is doable in terms of funding, environmental protection, and training realism. He would like to approach it from that direction in a collegial way with the military and the EMC, SAC, and CAC to be able to move something forward so soldiers could get the benefit now verses waiting to FY-18 on something that probably would never be funded.

Commissioner Griffin said it seems it reminds her of conversations at the prior two meetings about wanting to see some larger site planning for MMR and the Reserve. She said it would be useful to hear from the Guard what the planning process is.

COL Crivello said we are talking about a bigger concept here. The Community Working Group's Master Plan is still the foundation of everything the Guard does at MMR. The Guard developed a Site Consolidation Plan for Camp Edwards that took the broad picture of the Community Working Group and developed specifics for the future. The Air Guard did the same thing, and the Coast Guard was doing the same thing before BRAC happened and kind of slowed everybody down. Now that its post BRAC, the Air Guard knows exactly what its footprint is going be, and the Coast Guard knows what they are going to do in terms of runway operation and operating the Cantonment area.

COL Crivello explained that several months ago, the Adjutant General asked us to put together a committee to start looking at the future of the MMR, and one of the goals was to make sure that planning involves all three services and PAVE PAWS. Each service has certain requirements, but they have to interlock with each other in terms of the entire management of the site, and they also have to look at the broader picture of the Upper Cape Region as well, he said. He said discussions regarding utility systems management will need to take place. Currently, the Air Guard owns everything including the treatment plants and the distribution systems for all the major utilities; COL Crivello said that it's time to plan for the future when the Air Guard is not going to provide those services. Senator Murray got a grant to do studies for that as well as Homeland Defense and post-BRAC opportunities. He explained that MassDevelopment has had several discussions with the Guard about 210 acres of land on the base that was originally identified by the Community Working Group. The Adjutant General has said that he would be willing to hear proposals for that land that make sense for the military and for the surrounding communities. COL Crivello said that it's time to put those plans together and "grow a plan" for the entire MMR. The Guard has been working towards that and he thinks at the next meeting of the SAC or the CAC that could be an agenda item.

Commissioner Griffin said that sounds good and she hopes the public will be involved early in the process.

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COL Crivello said that community involvement is a big part of this, along with the committees that were established by Chapter 47.

Ms. McConnell said that out of the 22 people on the Community Working Group COL Crivello was an anchor--someone we trusted. She said that prior to the last joint meeting, the CAC and SAC had not met together in years, and has never met with the group set up to look at the Cantonment area. She said that we proposed not only a joint meeting of the CAC and SAC, but also meet with this other group, the Military Civilian Community Council, and have a discussion on where is the base going, the civilian proposals that are coming in or are not coming in, and who decides on projects in the future--either military or civilian. She said we haven't met with the Military Civilian Community Council for all kinds of reasons, and we need a structure; it is going to take some real time, and so the Guard is already into it.

COL Crivello said that the Guard recognizes that need.

Ms. McConnell said that time is passing quickly, and the thing is going to be pressed upon us, but we need to do our homework now and whether that means a new master planning process or something related to that it just seems that we need to move as quickly as we can.

Ms. Rohrbach, Senator O'Leary's office, said that she spoke with Senator O'Leary after the last CAC/SAC meeting about the Master Plan and whether a new one was needed. He said we already have a Master Plan, which appears to still be relevant, and how do the things that are being proposed fit into that. They spoke about what is the future management scenario and what is coming from MassDevelopment or other private interests. She said that it was really great to hear COL Crivello say that there will be a planning process and that it will include not only the EMC, the SAC and the CAC, but the public because it just seems to make a lot of sense to look at what everybody wants to do together and come up with the best economical and feasible things.

Commissioner Griffin said that starting with the already existing Master Plan is probably the first step and then compare these new things to that.

Ms. Rohrbach said that there are things that need to be dealt with so we need to make sure that we provide for those.

Commissioner Griffin said that maybe we will ask our Director to have an update on the planning process for our next meeting. Mr. Begley said maybe jointly.

#### **Agenda Item #8. Other Business/Public Comment**

There was no other business or public comment.

#### **Agenda Item #9. Adjourn**

The next meeting was not scheduled. The meeting adjourned at 5:00 p.m.